[0056] If a feature is located within the expanded area, the method proceeds to block **158** where a determination is made as to whether or not the feature is actuated (e.g., selected, activated, etc.). The determination may include monitoring the sensed object and associating or linking a particular feature to the sensed object. The association or link may be made by ranking the relevance of the sensed object to the feature. The ranking may for example include producing a figure of merit, and whichever feature has the highest figure of merit, giving it sole access to the events occurring with the sensed object. By way of example, the ranking may include calculating the centroid of a touch and its proximity to the feature.

[0057] If the feature is a web link, button or icon, the feature may be actuated via a change in touch pressure, a time based hover, or a tap. With regards to touch pressure, a first touch pressure may initiate expansion and a second touch pressure may initiate a select command. The first and second touch pressure may be made within a single touch (continuous contact) or they may be separate events. This particular implementation may be based on the principle that when a finger lightly touches a planer surface, then a relatively small contact area may be detected. When the finger is pressed more forcefully against the surface, then a relatively large contact area may be detected. With regards to a time based hover, a select command may be generated when the finger is positioned over a particular selectable feature for a predetermined amount of time. With regards to tapping, a select command is generated when the user taps their finger on the feature while the feature is in the expanded state. The select command may be generated at touchdown or lift off. Furthermore, the tap may be a single tap or a double tap.

[0058] If the feature is a user interface element, the feature may be actuated via a gesture. See for example, U.S. patent application Ser. No. 10/903,964, titled "GESTURES FOR TOUCH SENSITIVE INPUT DEVICES," and filed on Jul. 30, 2004, which is herein incorporated by reference. If the feature is a data entry feature, the feature may be actuated by entering data as for example through the use of a cursor or keyboard (e.g., word processing).

[0059] In cases where the expanded area includes a plurality of features, an intermediate block may be included between blocks **156** and **158**. The intermediate block includes providing feedback as to which feature is the most likely selectable feature based on some predefined criteria (the feedback indicates where a system thinks the user is targeting). The criteria may for example be based on the location of the sensed object relative the location of the various features. For example, the feature located closest to the object may indicate that it is the most likely candidate for selection. In essence, the feedback is a confirmation of correct targeting before selection. If the user does not get the right feedback, the user has the option of moving their finger to another location. The feedback may be visual or auditory. By way of example, visual feedback may include modifying the feature such as changing its color, position, size, shape, symbol, etc., and auditory indication may include providing sounds associated with the feature.

[0060] Once the feature is actuated, the method proceeds to block **160** where an action associated with the feature is performed. The action may for example include launching a particular program, opening a file or document, viewing a menu, making a selection, executing instructions, generating control signals, and the like. Following the action, the method may go back to start, or it may go back to block **154** depending on whether the user provides a continuous or segmented touch.

[0061] If the feature is not actuated or if there is no feature located within the expanded area, the method proceeds to block **162** where a determination is made as to whether or not the object (finger) is moving over the touchscreen. For example, if the object is standing still or whether the object is being dragged across the touch sensitive surface of the touchscreen.

[0062] If the object is moving, the method proceeds to block **164** where the expanded area is moved in accordance with the location of the moving object. That is, the expanded area follows the motion of the object. This is generally accomplished during continuous contact. In the case of a finger, the expanded area may follow the centroid of the finger's contact area. Following block **164**, the method proceeds back to block **156**.

[0063] If it is determined that the object is not moving, the method proceeds to block **166** where a determination is made as whether or not the object is still sensed. If so, the method proceeds to block **168** where the present expanded area is maintained. Thereafter, the method proceeds back to block **156**. If the object is not sensed, the method proceeds to block **170** where the expanded area is reduced to its normal state. The reduction may mimic the expansion, but in a reverse direction. By way of example, in embodiments where the expanded portion includes a plateau region and a transition region, the target area contained within the plateau region may be decreased in size and magnification. At the same time, the transition region may decompress the GUI between the target area contained in the plateau region and the remaining unexpanded portions of the GUI. As a result, the plateau region appears to integrate back into the remaining portions of the GUI. Furthermore, the reduction may occur immediately after the touch is not sensed or after some predetermined amount of time.

[0064] **FIG. 3** is a touch based selection method **180**, in accordance with one embodiment of the present invention. The selection method **180** may for example be used in blocks **158** and **160** described in **FIG. 2**. The selection method generally occurs after blocks **152-156** where 1) the object is placed on a touchscreen surface and a first touch is detected by the touchscreen, and 2) the area around the touch is expanded and a determination is made as to whether or not features such as buttons or links are located in the expanded area.

[0065] The method generally begins at block **182** where a determination is made as to whether or not the finger is lifted off of the touchscreen. If not, the method proceeds for example to block **162**. If so, the method proceeds to block **184** where the expanded state is maintained for a predetermined amount of time after the lift off. Thereafter, the method proceeds to block **186** where a determination is made as to whether or not a second touch is detected in the expanded area before the end of the time limit. If a second touch is detected, the method proceeds to block **188** where the second touch is associated with a feature in the expanded area and a select command associated with the feature is